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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,866	11/26/2003	Michael J. Gaboury	X-1431 US	9701
24309	7590	03/20/2006	EXAMINER	
XILINX, INC ATTN: LEGAL DEPARTMENT 2100 LOGIC DR SAN JOSE, CA 95124			MISKA, VIT W	
			ART UNIT	PAPER NUMBER
			2841	

DATE MAILED: 03/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/723,866

Applicant(s)

GABOURY, MICHAEL J. 

Examiner

Vit W. Miska

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
2. The terms "independent of noise" in claim 1, lines 8 and 12, and claim 13, lines 8 and 10, and "independent of...temperature variations" in claim 1, lines 12-13 and in claim 13 lines 10-13 are relative terms which renders the claims indefinite. These terms are not defined by the claims, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Further, it should be noted that no electrical device or system can be devised to be "independent" of temperature variations or noise in this broad sense, but can only be constructed to reduce such effects to a certain degree within specified limits.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the U.S. Patent to Shapre-Geisler. With respect to claims 1 and 13, the reference discloses a buffer including a current source 405,417 coupled to provide a current signal substantially independent of temperature variations (see col. 11, lines 60-64), a bias circuit 423 adapted to provide a first bias signal in response to the current signal, a decoupler 424, responsive to the first bias signal and a first power supply signal  $V_{dd}$ , and adapted to provide a load signal, and an input stage with differential pair 14, 17 coupled to receive the load signal as its supply reference, and adapted to provide an output signal OUT.

4. Regarding the remaining claims, the reference discloses the current source comprising an inversely Proportional To Absolute Temperature (PTAT) element 405 (see col. 11, line 32) coupled to provide a decreasing PTAT current signal with increasing temperature, and a PTAT element 417 coupled to receive the decreasing PTAT current signal and arranged to provide an increasing PTAT voltage signal with increasing temperature (see co. 11, line 58), the current source further comprises a

startup circuit 53, 76 adapted to provide a first current path prior to steady state operation of the buffer and a second current path subsequent to steady state operation of the buffer (see col. 6, lines 10-23), the bias circuit comprises a first current conduction device 423 coupled to receive the current signal at a first node and coupled to provide the first bias signal at the first node, the decoupler comprises a second current conduction device 424 having a geometry in ratio proportion to the first current conduction device (col. 11, line 64), clamping means in Fig. 11 and accelerating means having cross coupled circuit 13, 16.

5. The term "independent of ...noise" has been given its broadest reasonable interpretation, i.e. the circuit components in the patent are designed to be relatively unaffected by noise in response to circuit design parameters.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vit W. Miska whose telephone number is 571-272-2108. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, K. Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Vt Miska  
Primary Examiner

VM  
3/15/2006